BLAUPUNKT AUTORADIO

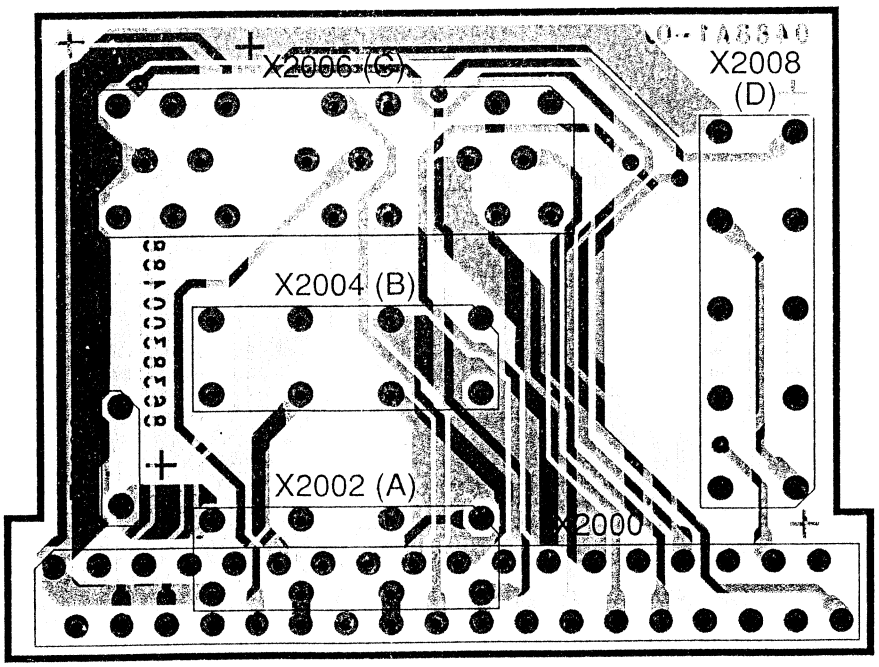
Audi Concert Plus A8
7 649 249 380

Audi Concert Plus A4/A6
7 649 246 380

8 622 402 015 BN-WG 06/99

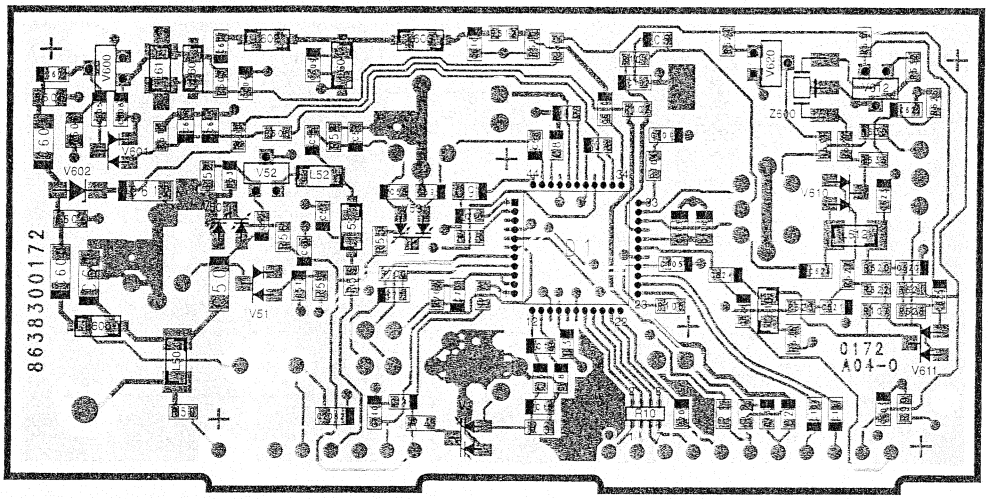
Schaltbild • Circuit diagram

Anschlußplatte
Connector board
PL 0488 A01

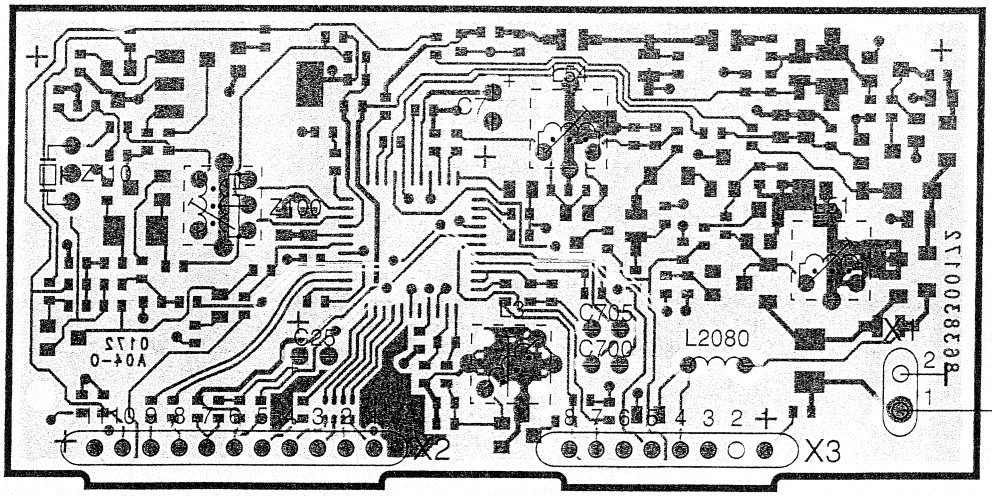


zu Schaltbild Audi Concert Plus A4/A6 und A8 8 622 401 015

HF-Platte
RF board
PL 0172 A04
Chip

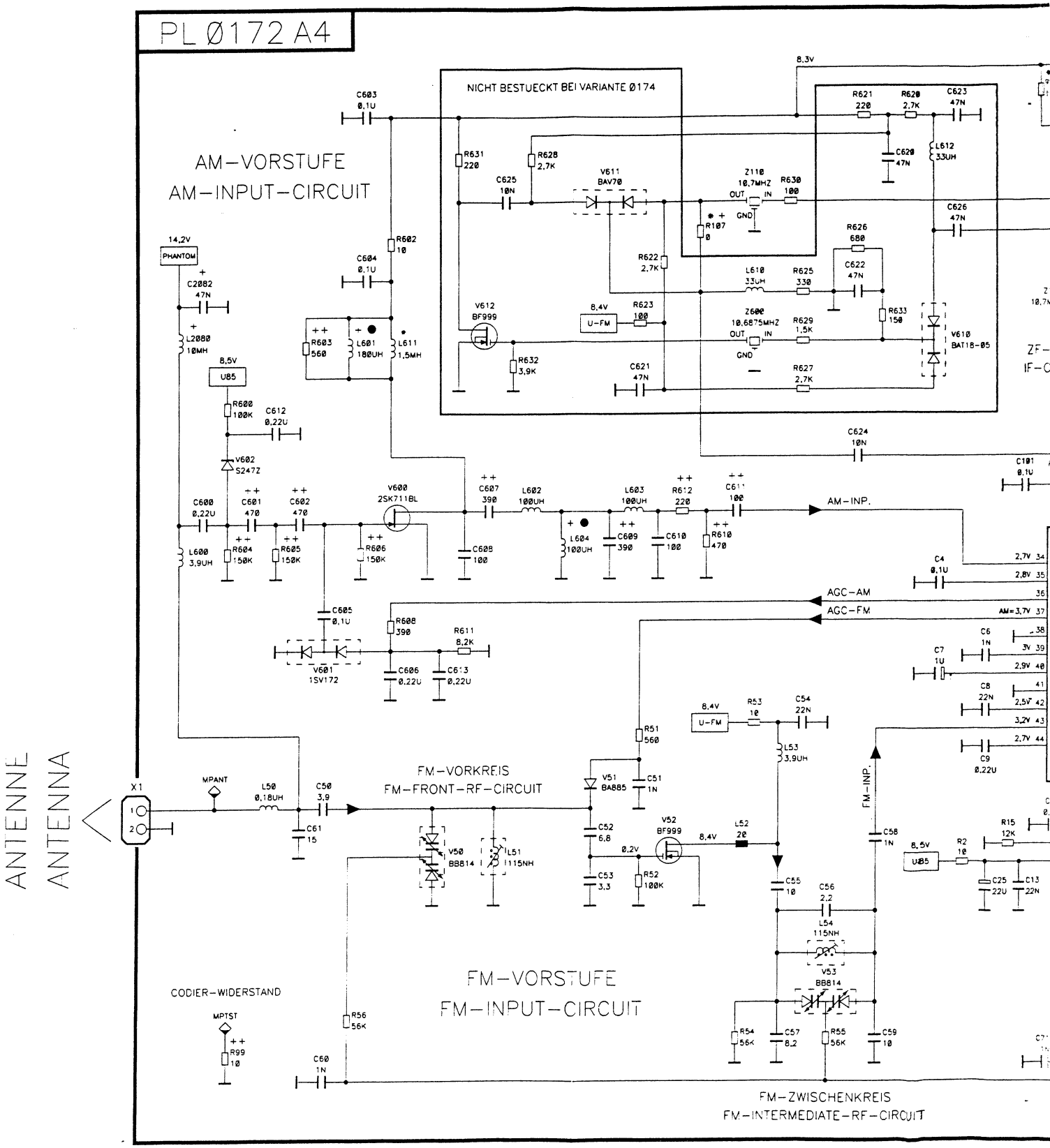


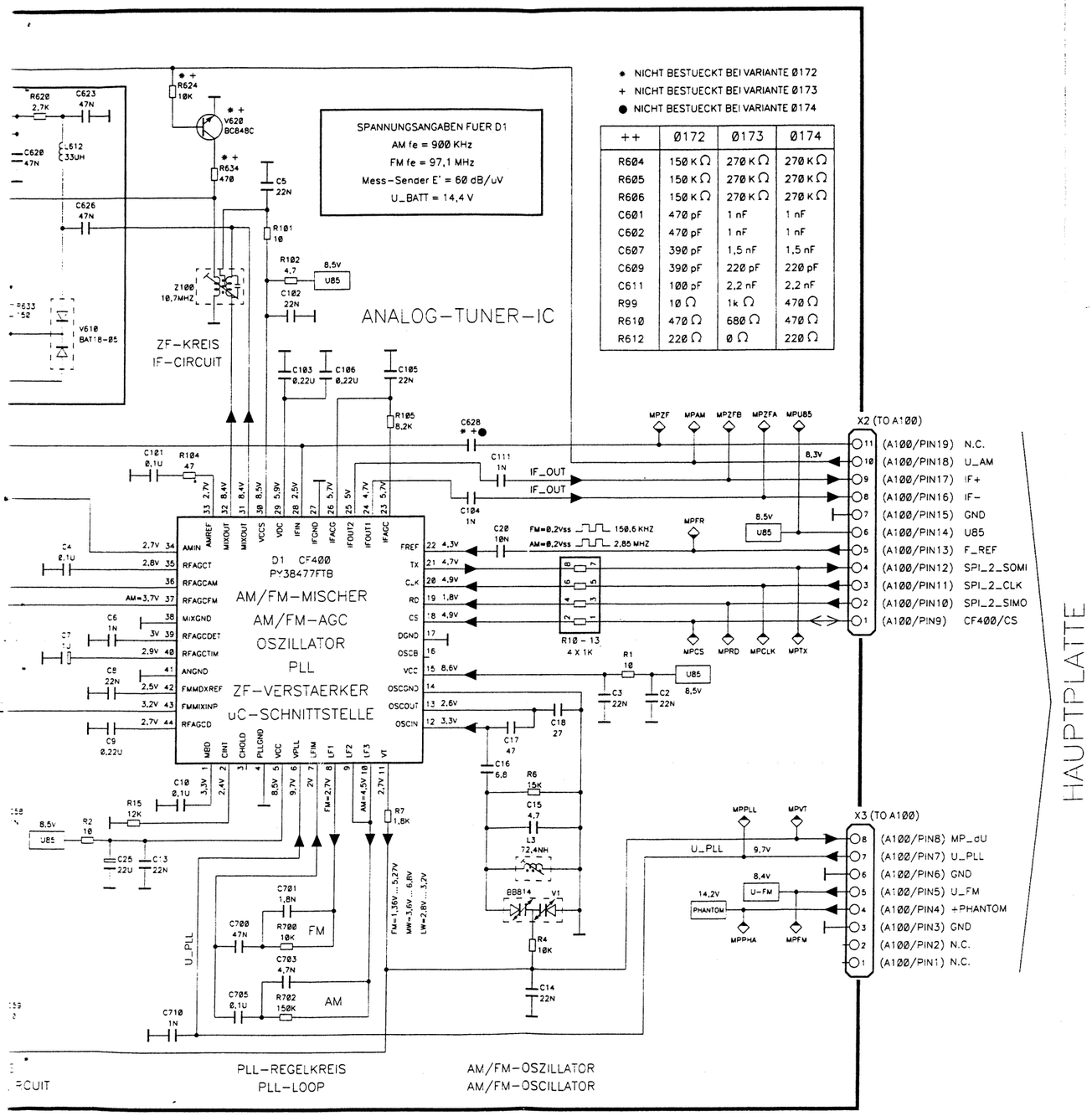
HF-Platte
RF board
PL 0172 A04



X2 (TO A100)
1 = CF400 / CS
2 = SPI_2_SIMO
3 = SPI_2_CLK
4 = SPI_2_SOMI
5 = F_REF
6 = U85 (8,5V)
7 = GND
8 = IF–
9 = IF+
10 = U_AM (8,3V)
11 = N.C.

X3 (TO A100)
1 = MP_ANT
2 = N.C.
3 = GND
4 = +PHANTOM (14V)
5 = U_FM (8,4V)
6 = GND
7 = U_PLL (9,7V)
8 = MP_dU


PL Ø172 A4
NICHT BESTUECKT BEI VARIANTE Ø174
AM–VORSTUFE
AM–INPUT–CIRCUIT
FM–VORKREIS
FM–FRONT–RF–CIRCUIT
FM–VORSTUFE
FM–INPUT–CIRCUIT
FM–ZWISCHENKREIS
FM–INTERMEDIATE–RF–CIRCUIT
CODIER–WIDERSTAND
ANTENNE
ANTENNA
AM–INP.
FM–INP.
AGC–AM
AGC–FM
X1
MPANT
MPTST
PHANTOM
U85
U–FM
V600 2SK711BL
V601 1SV172
V602 S247Z
V610 BAT18–05
V611 BAV70
V612 BF999
V50 BB814
V51 BA885
V52 BF999
V53 BB814
Z110 10,7MHZ
Z600 10,6875MHZ
L50 0,18UH
L53 3,9UH
L54 115NH
L600 3,9UH
L601 180UH
L602 100UH
L603 100UH
L604 100UH
L610 33UH
L611 1,5MH
L612 33UH
L2080 10MH
L51 115NH
C2082 47N
C50 3,9
C51 1N
C52 6,8
C53 3,3
C54 22N
C55 10
C56 2,2
C57 8,2
C58 1N
C59 10
C60 1N
C61 15
C6 1N
C7 1U
C8 22N
C9 0,22U
C13 22N
C25 22U
C4 0,1U
C101 0,1U
R51 560
R52 100K
R53 10
R54 56K
R55 56K
R56 56K
R99 10
R2 10
R15 12K
R600 100K
R601 150K
R602 10
R603 560
R604 150K
R605 150K
R606 150K
R607 390
R608 390
R609 390
R610 470
R611 8,2K
R612 220
R621 220
R622 2,7K
R623 100
R625 330
R626 680
R627 2,7K
R628 2,7K
R629 1,5K
R630 100
R631 220
R632 3,9K
R633 150
C600 0,22U
C601 470
C602 470
C603 0,1U
C604 0,1U
C605 0,1U
C606 0,22U
C607 390
C608 100
C609 390
C610 100
C611 100
C612 0,22U
C613 0,22U
C620 47N
C621 47N
C622 47N
C623 47N
C624 10N
C625 10N
C626 47N
14,2V
8,5V
8,4V
8,3V
8,2V
8,5V
0,2V
2,7V
2,8V
3V
2,9V
2,5V
3,2V
AM=3,7V



Prüfdiagnose Tuner IC (D1)
Diagnosis test tuner IC (D1)

Pin	Band	Frequenz	E'	Uss	Vermerke	Notice
24+25 (ZF-OUT)	FM	97,1 MHz	83 dbµV	650 mVss	jeweils gegen Masse	respective against GND
28	FM	97,1 MHz	80 dbµV	25 mVss		
31+32	FM	97,1 MHz	80 dbµV	200 mVss	jeweils gegen Masse	respective against GND
31+32	AM	900 kHz	80 dbµV	200 mVss	jeweils gegen Masse	respective against GND
34 (AM-IN)	AM	900 kHz	80 dbµV	50 mVss		
36	AM	900 kHz	ab 73 dbµV		künstliche Antenne aus	not commutated
37	FM	97,1 MHz	ab 80 dbµV			
43 (FM-IN)	FM	97,1 MHz	94 dbµV	5 mVss		

Pin-Belegung des FM/AM Tuner-IC D1
Tuner IC D1 Pin configuration

Pin No.	I/O	Name	Funktion	Function
1	-	MIXDEC	Mischer Entkopplung	Mixer decoupling
2	-	CINT	für PLL	for PLL
3	-	CHOLD	für PLL	for PLL
4	-	PLLGND	PLL - Masse	PLL Ground
5	-	VCC	8,5V	8,5V
6	-	VPLL	PLL Oberspannung	PLL top voltage
7	I	LFINP	Schleifenfiltereingang	PLL loop filter Input
8	O	LF1	Schleifenfilter 1	PLL loop filter Output 1
9	O	LF2	Schleifenfilter 2	PLL loop filter Output 2
10	O	LF3	Schleifenfilter 3	PLL loop filter Output 3
11	I	VTUNE	Abstimmspannung	Tuning voltage
12	I	OSCINP	Oszillator Eingang	Oscillator Input
13	O	OSCOUT	Oszillator Ausgang	Oscillator Output
14	-	OSCGND	Oszillator Masse	Oscillator Ground
15	O	VCC	8,5V	8,5V
16	O	OSCBUF	Oszillatorausgangstreiber	Oscillator Buffer Output
17	I	DGND	Digitale Masse	Digital Ground
18	I	CS	Chip Select	Chip Select
19	I	RD	Dateneingang	DATA IN
20	I	CLK	Clock	Clock
21	O	TX	Datenausgang	DATA OUT
22	I	FREF	Referenzfrequenz	Reference frequency
23	-	IFAGC2	ZF Regelspannung 2	IF AGC 2
24	O	IFOUT1	ZF - Ausgang 1	IF output 1
25	O	IFOUT2	ZF - Ausgang 2	IF output 2
26	-	IFAGC1	ZF Regelspannung 1	IF AGC 1
27	-	IFGND	ZF Masse	IF Ground
28	I	IFIN	ZF Eingang	IF Input
29	-	VDC	Interne Referenzspannung	Internal reference voltage
30	-	VCC	8,5V	8,5V
31	O	MIXOUT2	Mischerausgang 2	Mixer Output 2
32	O	MIXOUT1	Mischerausgang 1	Mixer Output 1
33	-	AMREF	AM - Referenzeingang	AM reference Input
34	I	AMMIXIN	AM Mischereingang	AM Mixer Input
35	-	RFAGC3	HF Regelzeitkonstante (aufregeln)	RF AGC 3
36	O	RFAGCAM	HF Steuerspannung Vorstufe AM	RF AGC for AM input stage
37	O	RFAGCFM	HF Steuerspannung Vorstufe FM	RF AGC for FM input stage
38	-	MIXGND	Mischer Masse	Mixer Ground
39	-	RFAGC2	HF Regelzeitkonstante (Detektor)	RF AGC 2
40	-	RFAGC1	HF Regelzeitkonstante (abregeln)	RF AGC 1
41	-	ANGGND	Analog Masse	Analog ground
42	-	FMMIXREF	Referenzspannung FM Mischer	Reference voltage FM mixer
43	I	FMMIXINP	FM Mischer Eingang	FM mixer input
44	-	RFAGCD	AGC Entkopplung	AGC decoupling

HAUPTPLATTE
MAIN BOARD

(TO X1300) X1201
N.C. 9
CC_SW_PLAY 8
GND 7
+14V 6
SCL 5
SDA 4
CRQ 3
+5V 2
CRST 1

W4250
SW_ME/CR
C2204 33
W4207
W4209 W4203 U52 5V
R3210 22K
V6201 BAT 54 A
5V U52 RST
V7202 DTA 144 EKA
47k 47k
C2205 100N

D7201
83C751
P3_4 1
P3_3 2
P3_2 3
P3_1 4
P3_0 5
P0_2 6
P0_1/SDA 7
P0_0/SCL 8
RST 9
X2 10
X1 11
VSS 12
VCC 24 5,0V
P3_5 23
P3_6 22
P3_7 21
P1_7/T0 20 0,7V
P1_6/INT1 19 5,0V
P1_5/INT0 18 5,0V
P1_4 17 5,0V
P1_3 16 0V
P1_2 15 5,0V
P1_1 14 5,0V
P1_0 13 0V

R3204 470 5,0V
R3205 220 5,0V
R3206 220 5,0V
40mVSS 2,7V
W4205 Z1211 8MHZ
30mVSS 2,5V

U52 RST 5V
W4201
L3216
5V U52
C2208 100N
C2209 22U/10V
14,4V
R3114 47K
R3115 1,2K
R3120 1,2K
V7102 BC 638-16
UC14 14,2V
C2105 100N
C2104 22U/25V
V7103 BC 847
S_ON
R3223 470
R3217 10K
R3218 10K

W4202
SM2
PULSE
SMI
SMO
SM3
CMI
CMO

5,0V
▼=0V ▲=5,0V
▼=5,0V ▲=0V
0,1V
5,0V
14,2V UC14
R3107 1K
4,8V
R3108 1K
0,2V
R3116 1K
R3117 1K
R3118 1K
R3119 1K
R3121 1K
R3122 1K
13,0V
7,0V
14,2V UC14

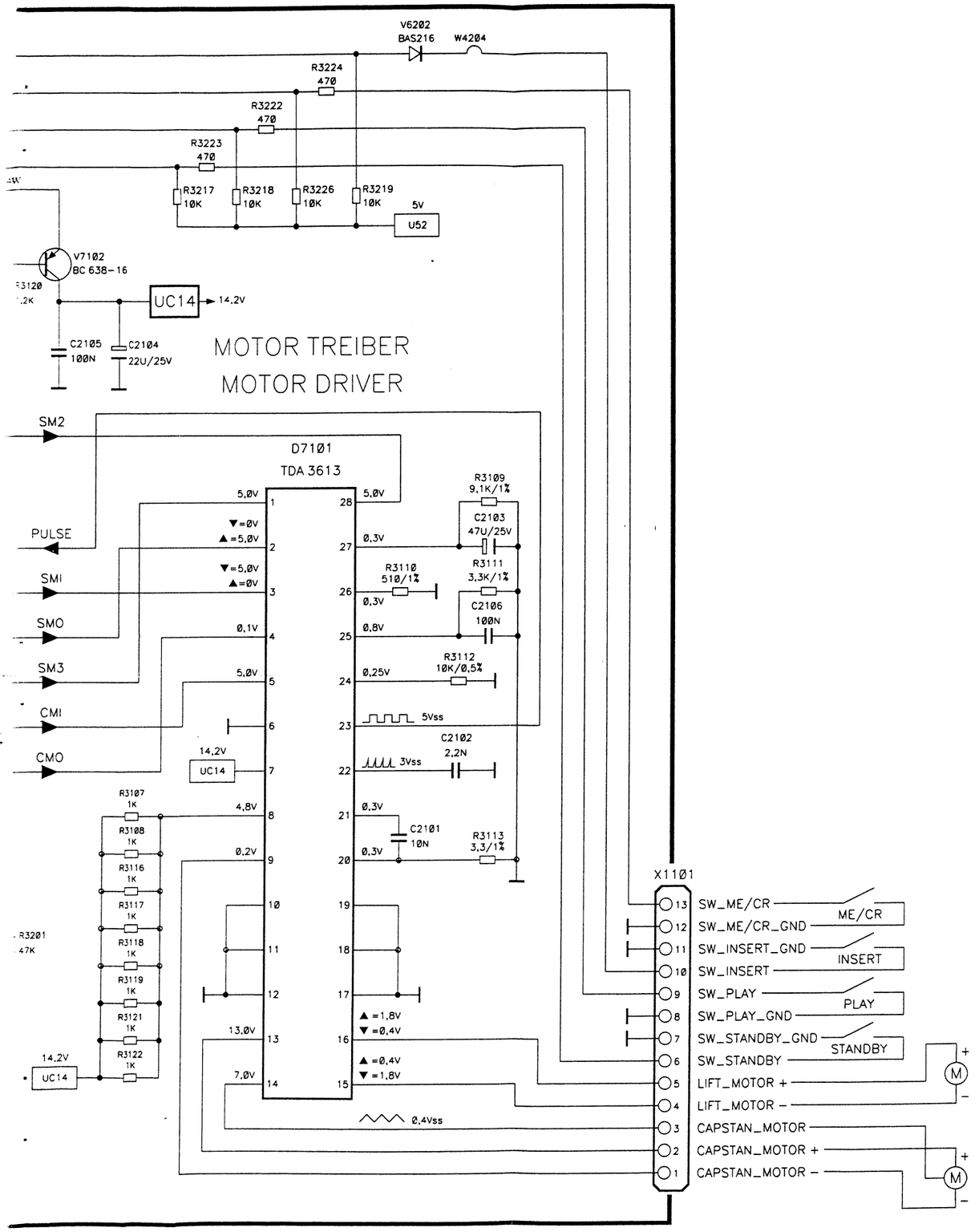
TONBAND STEUERUNG
TAPE CONTROLLER

10k V7203 IDTC114TKA
R3213 1K
RESET

5V U52
R3225 10K
R3207 47K
R3227 10K
R3208 47K
R3203 47K
R3209 47K
R3202 47K
R3201 47K

LOGIK–PLATTE
LOGIC BOARD

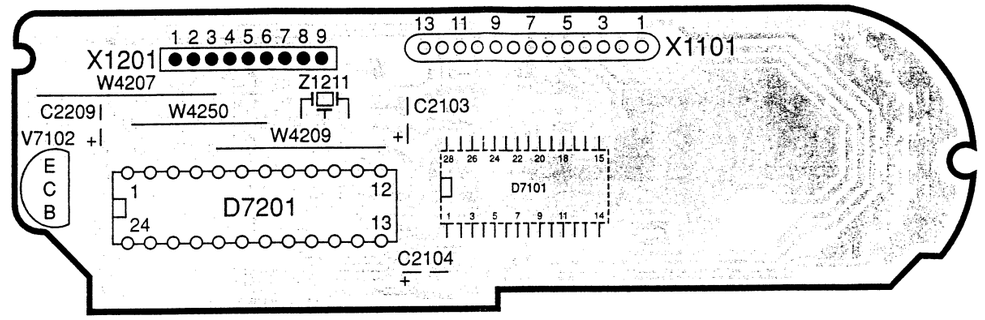
Phillips
SCA 3.3
8 638 812 092



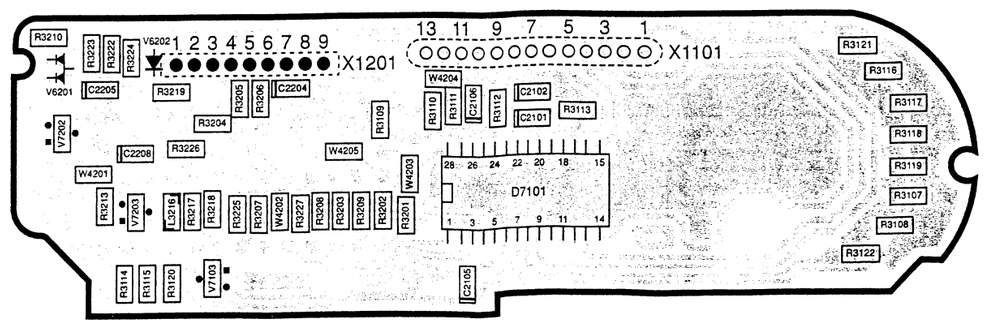
Logik-Platte
Logic board
(SCA 3.3)

X1201 (TO X1300)
1 = CRST
2 = +5V
3 = CRQ
4 = SDA
5 = SCL
6 = +14V
7 = GND
8 = CC_SW_PLAY
9 = N.C.

X1101
1 = CAPSTAN_MOTOR –
2 = CAPSTAN_MOTOR +
3 = CAPSTAN_MOTOR
4 = LIFT_MOTOR –
5 = LIFT_MOTOR +
6 = SW_STANDBY
7 = SW_STANDBY_GND
8 = SW_PLAY_GND
9 = SW_PLAY
10 = SW_INSERT
11 = SW_INSERT_GND
12 = SW_ME / CR_GND
13 = SW_ME / CR



Logik-Platte
Logic board
(SCA 3.3)
Chip



RUECKMELDUNG

D1070
MC14094BD

D1080
MC14094BD

LCD-TEMPERATURKOMPENSATION
D1030
LM2580

NACHTDESIGN

DISPLAYBELEUCHTUNG

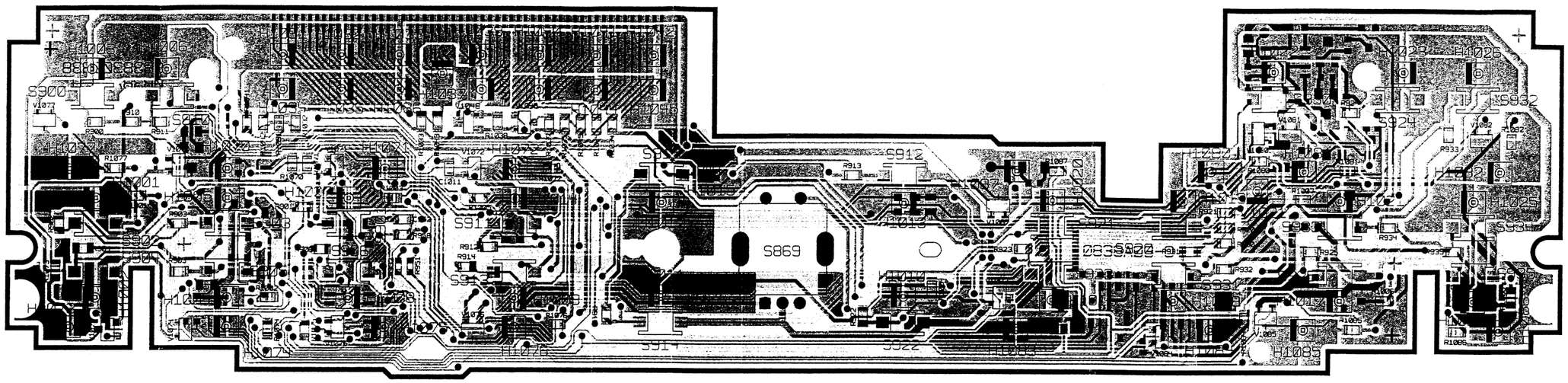
D1000
ST6280B

X1001 (TO X1000)
- GND
- U52
- REMOTE
- U51
- RUECKM-PWM
- PANEL-CS
- WATCHDOG-RESET
- PANEL-CLK
- PANEL-DATA
- U141
- PANEL-REQUEST
- RESET
- NACHTDESIGN-PWM
- DISPLAY-PWM

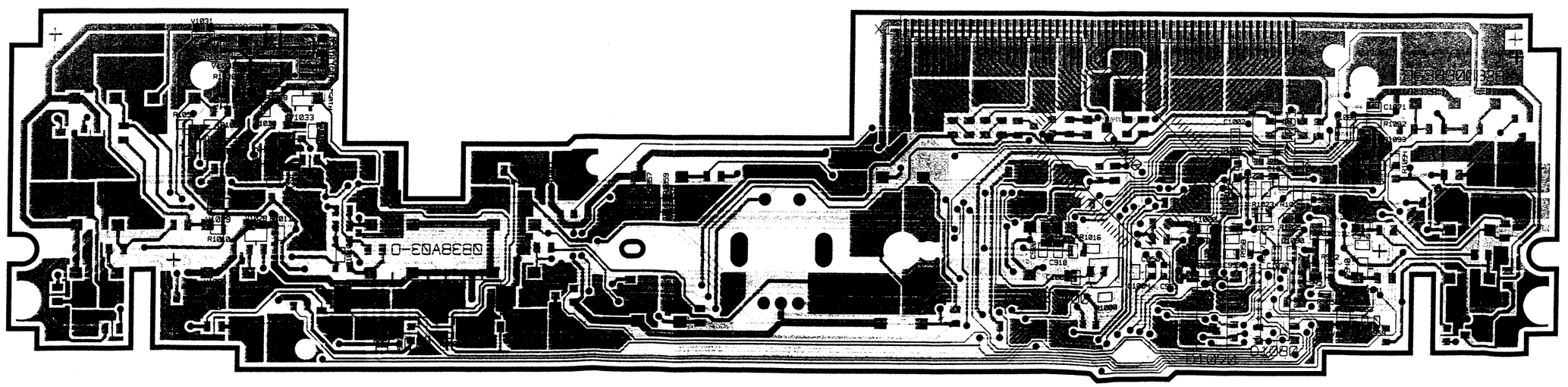
Hauptplatte

Schalterplatte
Key board
PL 0838 A03

Schalterplatte
Key board
PL 0838 A03
Chip



Schalterplatte
Key board
PL 0838 A03
Chip

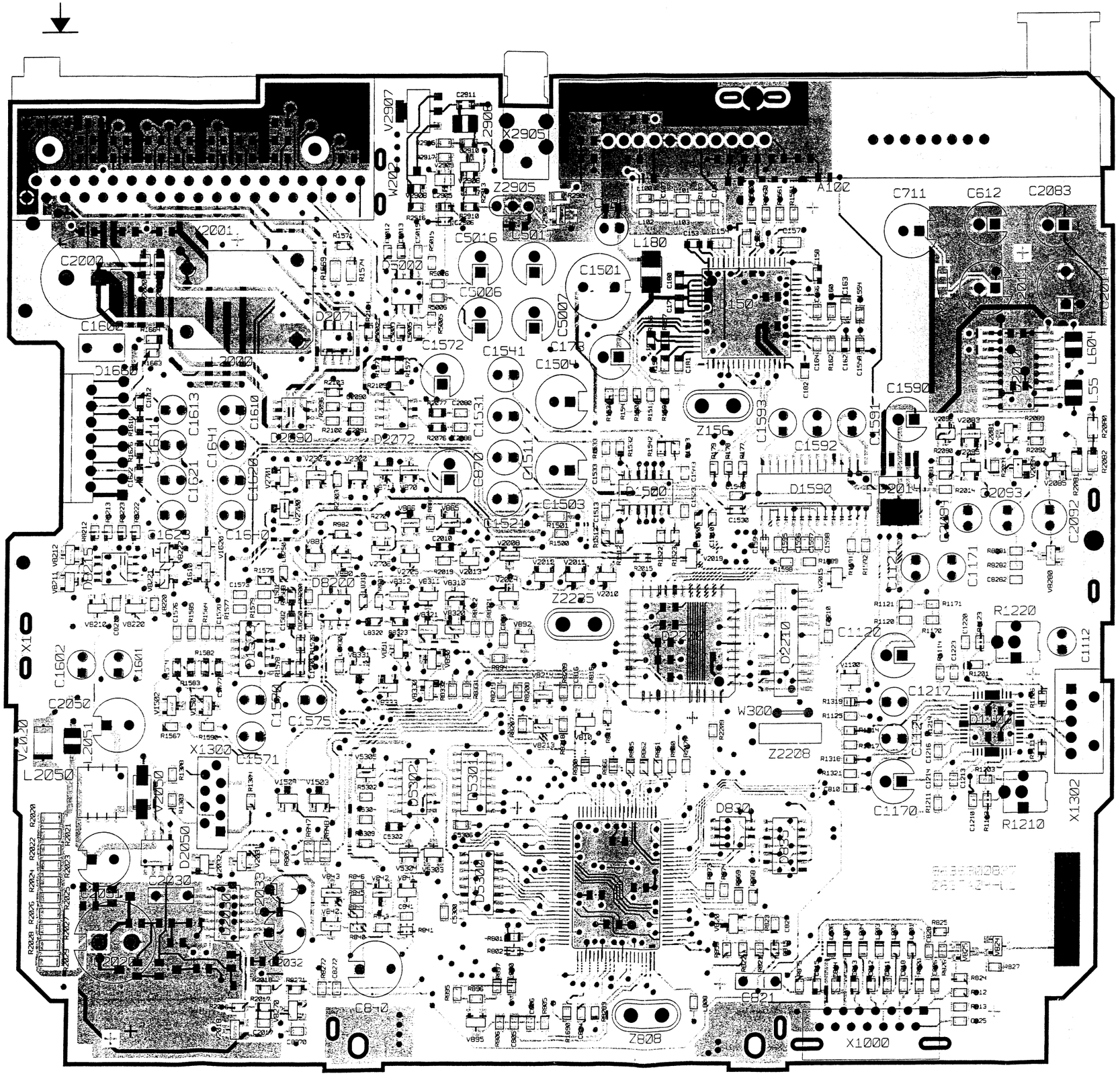


X1001 (TO X1000)

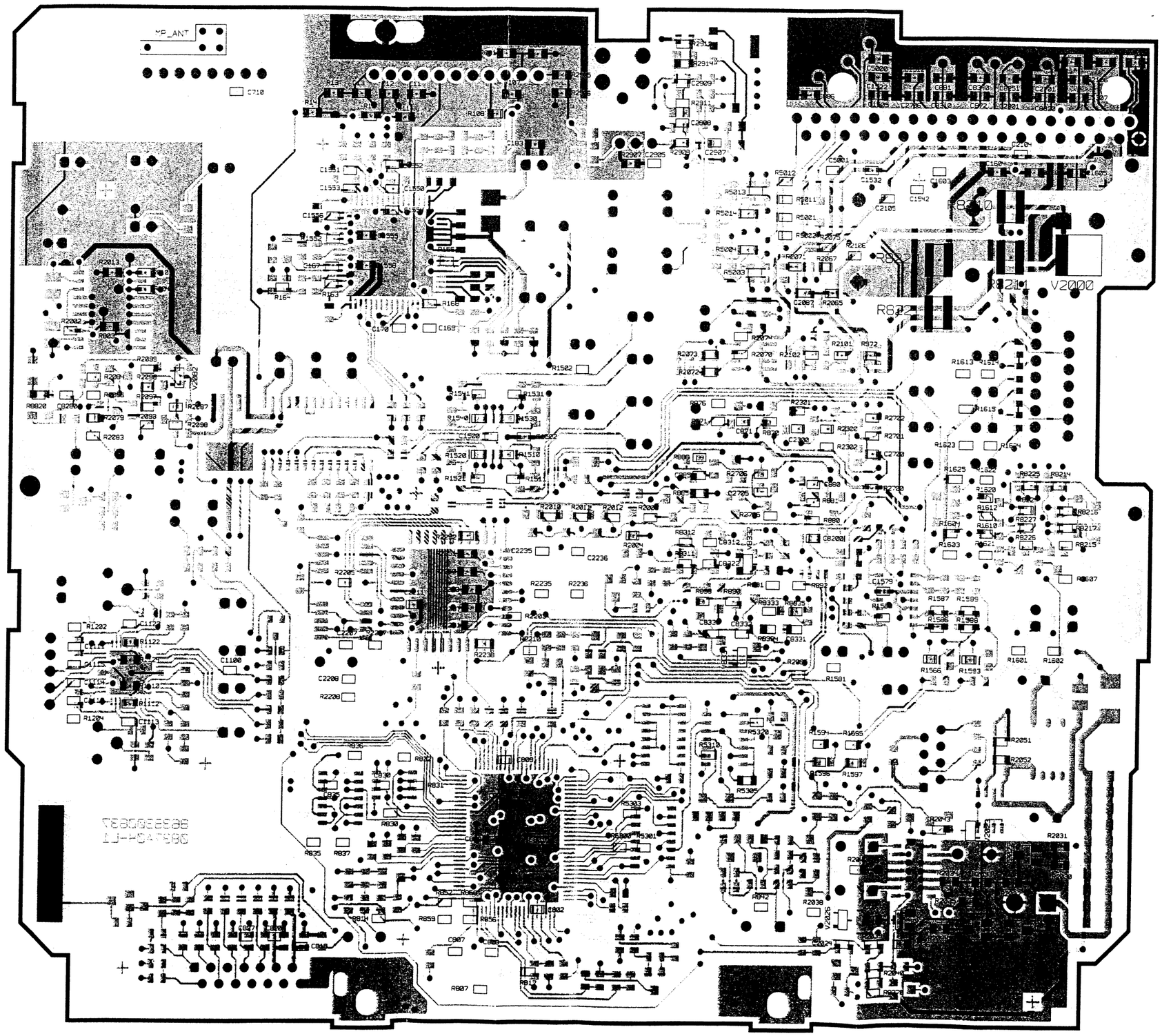
	16	
	15	
	14	GND
U52	13	U52
	12	REMOTE
U51	11	U51
	10	RUECKM-PWM
	9	PANEL-CS
	8	WATCHDOG-RESET
	7	PANEL-CLK
	6	PANEL-DATA
U141	5	U141
	4	PANEL-REQUEST
	3	RESET
	2	NACHTDESIGN-PWM
	1	DISPLAY-PWM

Hauptplatte
Main board

Hauptplatte
Main board
PL 0837 A04
B + Chip

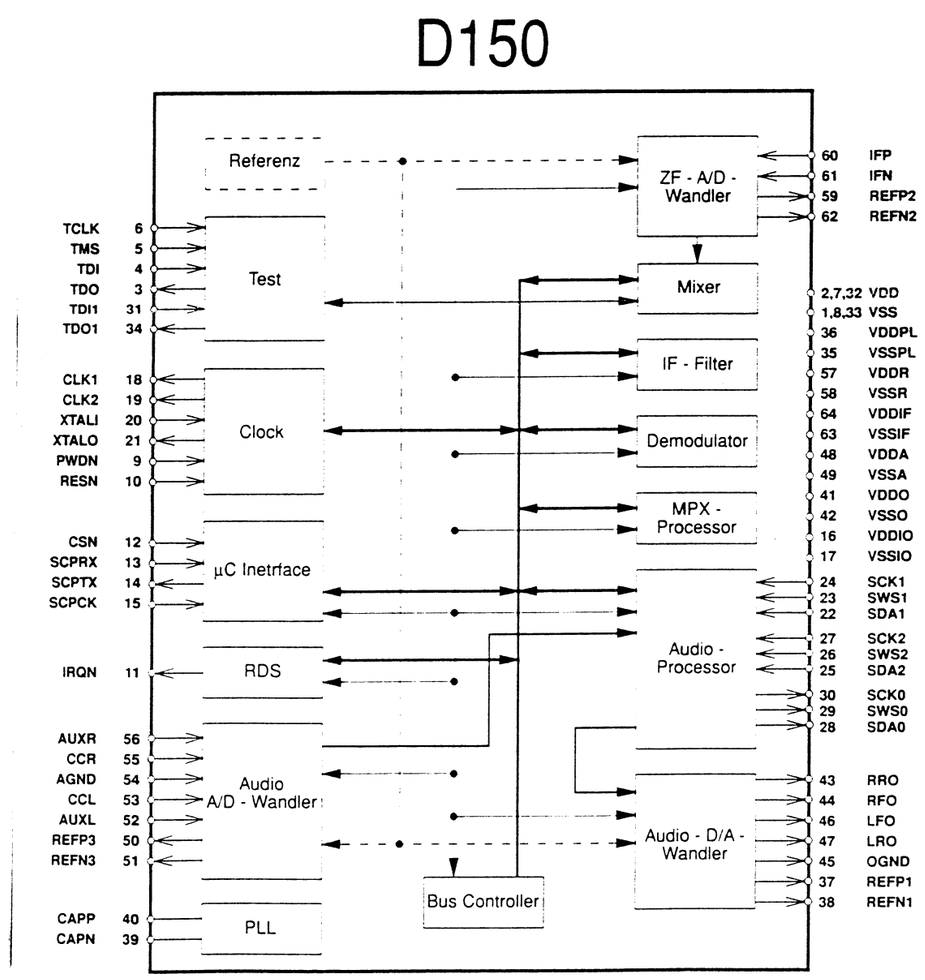


Hauptplatte
Main board
PL 0837 A04
Chip



Pin-Belegung des IC D150
Digital IC D150 Pin Configuration

Pin No.	I/O	Name	Funktion	Function
1	-	VSS	Masse	Ground
2	-	VDD	5 V	5 V
4	I	TDI	Testdateneingang	Test Data Input
5	I	TMS	Test Mode	Testmode
6	I	TCKL	Test Clock	Testclock
7	-	VDD	5 V	5 V
8	-	VSS	Masse	Ground
9	-	PWDN	Power down Zustand	Power down Mode
10	I	RESN	Reset	Hardware reset (active LOW)
11	O	IRQN	RDS Alarm/SLS	RDS alarm/search stop
12	I	CSN	Chip select Eingang	Chip select µC interface
13	I	SCPRX	Serielle Daten µC Interface	Serial data µC interface IN
14	O	SCPTX	Senelle Daten µC Interface	Serial data µC interface OUT
15	I	SCPCK	Clock µC Interface	Clock µC interface
16	-	VDDIO	Plusspannung Digitale Ein-/Ausgänge	Voltage for digital I/O
17	-	VSSIO	Masse Digitale Ein-/Ausgänge	Ground for digital I/O
18	O	CKL1	Programmierbarer Clock 1	Programmable clock 1
20	I	XTALI	28.5 MHz Oszillator	Oscillator 28.5 MHz
21	O	XTALO	28.5 MHz Oszillator	Oscillator 28.5 MHz
31	I	TDI1	Testdateneingang 1	Test Input 1
32	-	VDD	5 V	5 V
33	-	VSS	Masse	Ground
35	-	VSSPLL	Masse (Minus) PLL	Ground (minus) PLL
36	-	VDDPLL	Plus PLL 5V	PLL 5V (pos.)
37	O	REFP1	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
38	O	REFN1	Audio D/A-Wandler Negative Referenz	Audio D/A converter (neg. reference)
39	-	CAPN	PLL Kapazität (negativ)	PLL capacity (neg.)
40	-	CAPP	PLL Kapazität (positiv)	PLL capacity (pos.)
41	-	VDDO	Audio D/A - Wandler 5V	Audio D/A converter (+5V)
42	-	VSSO	Audio D/A - Wandler Masse	Audio D/A converter (ground)
44	O	RFO	Audio Rechts (analog)	Analogic audio right
45	-	OGND	Masse Analogausgänge	Ground
46	-	LFO	Audio Links (analog)	Analogic audio left
48	-	VDDA	5V A/D - Wandler	5V A/D - converter
49	-	VSSA	Masse A/D - Wandler	Ground A/D - converter
50	O	REFP3	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
51	O	REFN3	Audio D/A-WandlerNegative Referenz	Audio D/A converter (neg. reference)
52	I	AUXL	Externer Eingang links	Auxillary left
53	I	CCL	Cassette Eingang links	Cassette input left
54	-	AGND	Audioeingänge Masse	Ground for Audio inputs
55	I	CCR	Cassette Eingang rechts	Cassette input right
56	I	AUXR	Externer Eingang rechts	Auxillary left right
57	-	VDDR	5 V	5 V
58	-	VSSR	Masse	Ground
59	O	REFP2	Audio D/A-Wandler Positive Referenz	Audio D/A converter (pos. reference)
60	I	IFP	ZF Eingang (plus)	Positif IF input
61	I	IFN	ZF Eingang (minus)	IF input (neg.)
62	O	REFN2	Audio D/A-Wandler Negative Referenz	Audio D/A converter (neg. reference)
63	-	VSSIF	ZF A/D - Wandler (minus)	IF A/D converter (-)
64	-	VDDIF	ZF A/D - Wandler 5 V	IF A/D converter (+5V)



Tuner-Modul

Tuner-Modul (Antennenbuchse)

CC-Laufwerk
CC-Mechanism
(Phillips SCA 3.3)

ZF-AUSGANG

ZF-FILTER

DIGITALE
SIGNALVERARBEITUNG

A100 (TO X2 + X3)

MP_ANT (TO X1)

ANTENNENBUCHSE

X1300 (TO X1201)

CC-CONNECTOR

PHANTOMSPEISUNG

CC-VORVERSTAERKER

VERKEHRSFUNKSPEICHER

IGITALE
ERARBEITUNG

Vol./Bal./Fad. -Steller

NF-ENDSTUFE

DIAGNOSE

LINE-OUT-TREIBER

Telefon-Navi-Mute

MOTORANTENNE ON/OFF

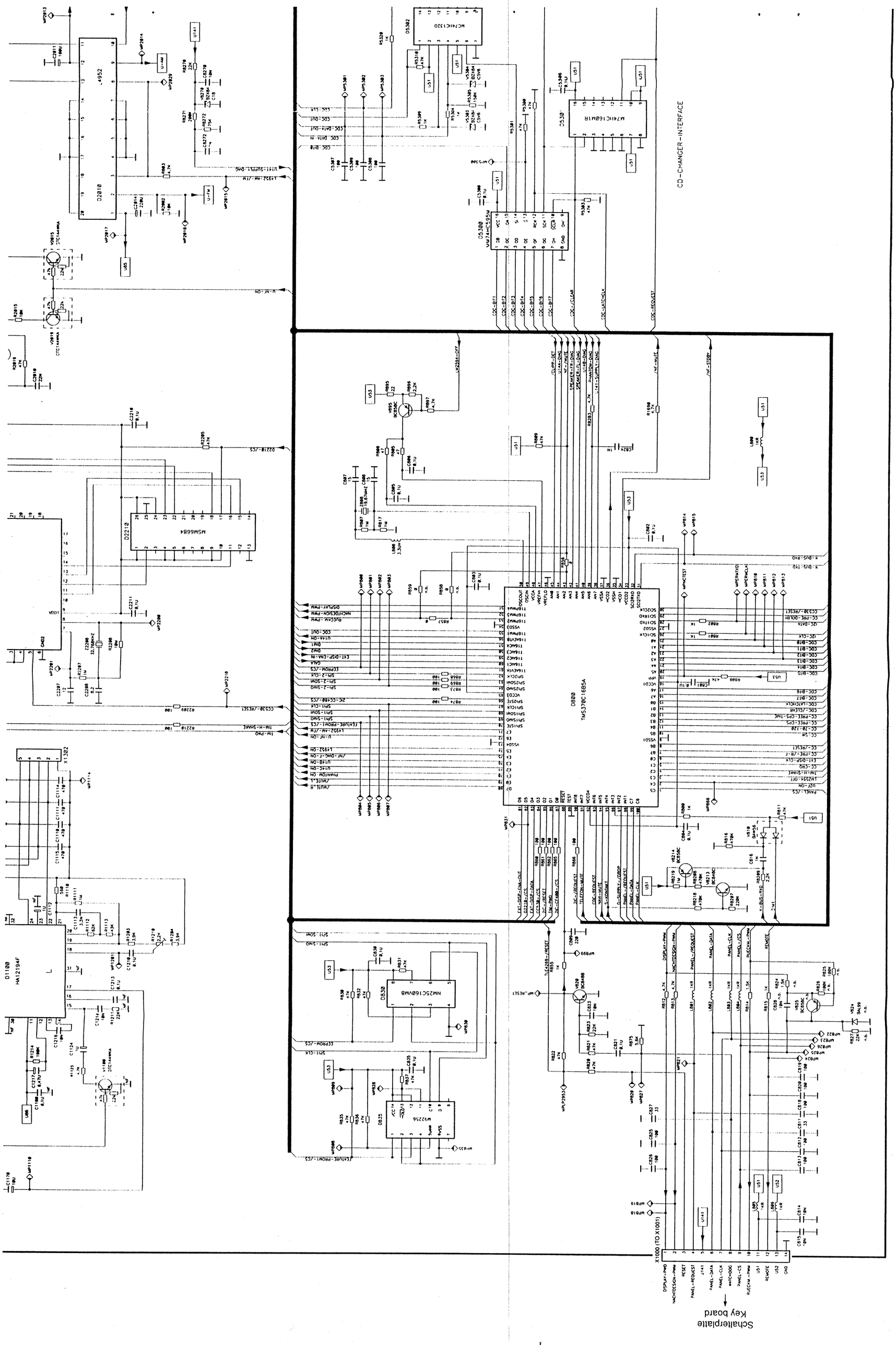
BOOSTER ON/OFF

GALA

S-KONTAKT

DIMMER 1

DIMMER 2


CD-CHANGER-INTERFACE
D2010
D5382
D5381
D5380
D1100
D0800
D0830
D0835
D2210
X1000 (TO X1001)
Schalterplatte
Key board

CD-NF-EINGANG

2.DISPLAY

K-Bus-Interface

Remote

DIMMER 2

TELEFON-MUTE

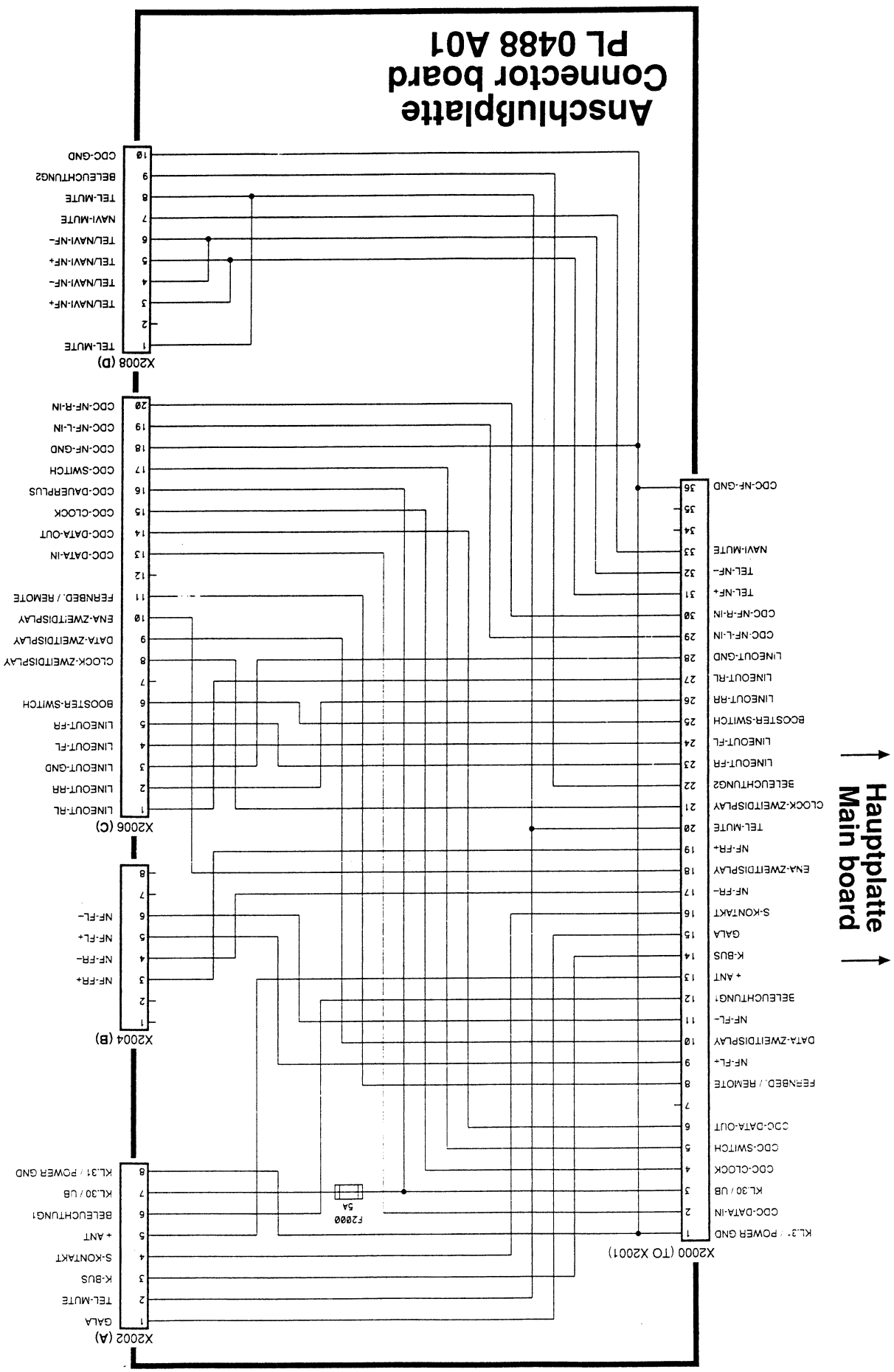
NAVI-MUTE

CHANGER ON/OFF

-CHANGER-INTERFACE

Anschlußplatte
Connector board

X2001 (TO X2000)



Blaupunkt-Werke GmbH, Hildesheim

Änderungen vorbehalten! Nachdruck - auch auszugsweise nur mit Quellenangabe gestattet.

Modification réservées! Reproduction - aussi en abrégépermise seulement avec indication des sources utilisées.

Gedruckt in Deutschland
Printed in Germany by Oeding Druck
38100 Braunschweig

Modification reserved! Reproduction - also by extract only permitted with indication of sources used.

¡Modificaciónes reservadas! Reproducción - también en parte solamente permitida con indicación de las fuentes utilizadas.